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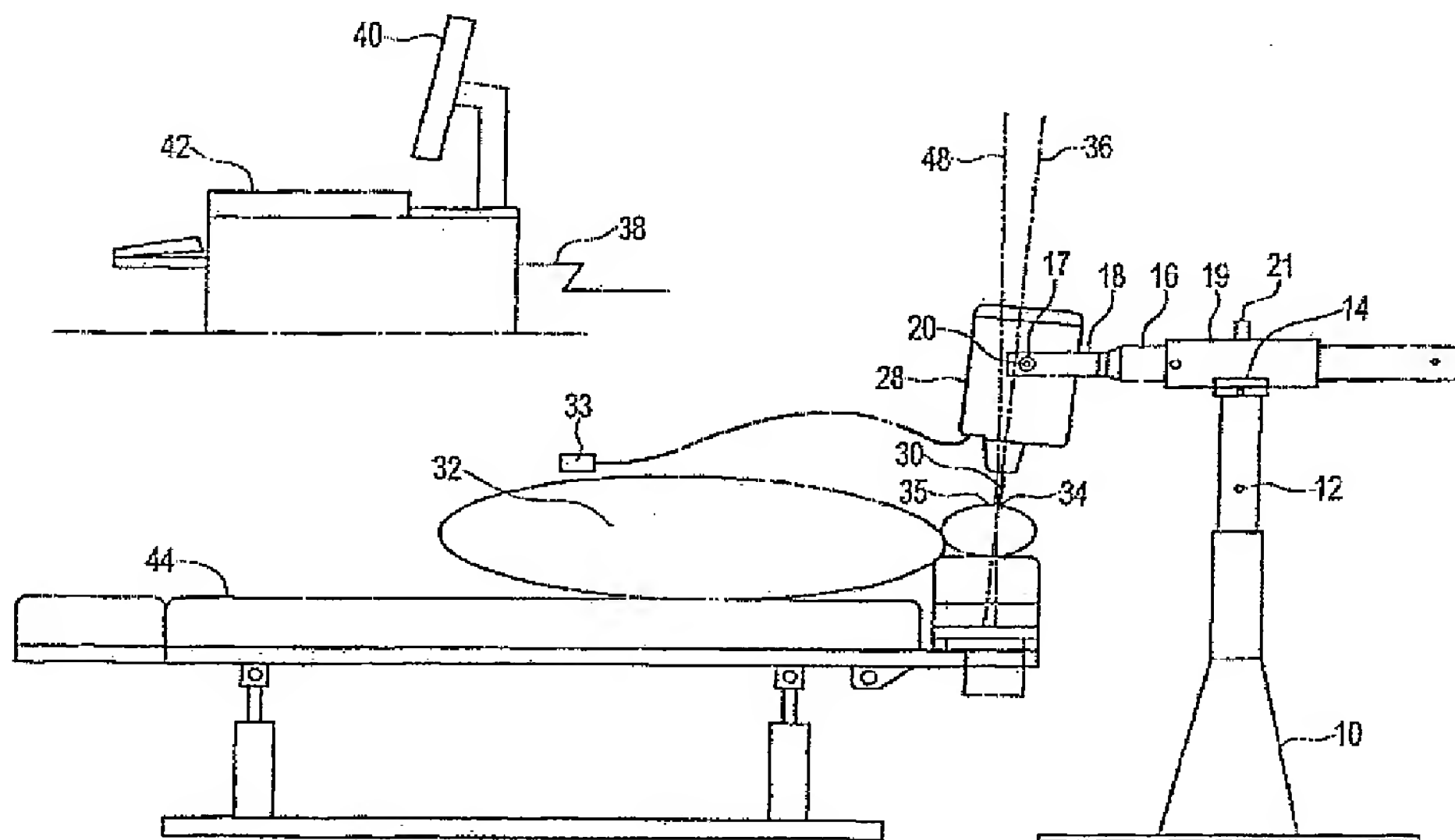
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(54) Title: SPINAL AND UPPER CERVICAL IMPULSE TREATMENT DEVICE



(57) Abstract: The current invention is a spinal and upper cervical impulse treatment device and controller, which delivers multiple impulses of variable frequency and variable force in a linear direction, as well as rotational forces, for patient treatment. Known chiropractic impulse devices are all hand held devices. In contrast, the spinal and upper cervical impulse treatment device is mounted on a fixed stand and armature, allowing reliable positioning and directional alignment in three dimensions. Fixed mounting also facilitates ease of use. A safety coupling is incorporated to avoid patient injury due to excessive force on the treatment site in the fixed mounting scenario. Smooth sinusoidal waveforms are a preferred waveform for impulse delivery and sine waves are generated digitally in the apparatus. Data validation is used to ensure correct directional alignment prior to device activation. Patient safety and consistency in treatment protocols are considered in the spinal and upper cervical impulse treatment design.